Common Insect Pests of Yellow Pine Seedlings

Tennessee Department of Agriculture, Division of Forestry

Pales Weevil and the pitch-eating weevil are major threats to pine plantations. Pales weevil poses the greater problem of the two. It is about 3/8 inch long, is dark reddish brown with scattered yellow speckles, and has a distinctive curved snout and bent antennae.

The larvae live in stumps and slash less than a year old. Adults, not larvae, do the damage. They emerge in early spring and chew down to the inner bark of seedlings, often below the soil line.

The weevil can be controlled by

- Harvesting earlier than July 1. Stumps that weather over the summer are not suitable for weevil grubs. Any area cut prior to July 1 can be planted the next winter.
- Delaying planting of areas cut after July 1. Anything cut after July 1 should not be planted until the second winter. This option deprives the landowner of one year's growth, which is far more costly in the long run than control with insecticides.
- Applying insecticides. Insecticides can be applied either as a seedling dip, sprayed at the base of seedlings, or sprayed mixed with kerosene or fuel oil on stumps.

Several insecticides are labeled for pales weevil, but Division foresters have found Pounce® to be the most satisfactory. Seedlings treated with Pounce, while not advertised, may be available upon request from the Tennessee Division of Forestry for $3.00 extra per thousand. Treated seedlings may also be available from some forest industries.

When choosing any other labeled insecticide, make sure it will not wash off easily or break down too soon. When selecting an insecticide, consult your Tennessee Division of Forestry Area Forester or Agricultural Extension Agent for advice.

The Nantucket Pine Tip Moth commonly deforms trees and stunts growth by killing the tips of branches, mostly on trees less than 10 feet tall. The larvae live in the buds and middle of new twigs. Chemical control in plantations is not practical, but cultural measures to reduce the severity of infestation include planting at a close spacing, mixing with other species, diversifying stand structure, and fertilization. Tip moths pose the greatest problem on poor sites.

Red Headed Pine sawflies cause partial to total defoliation. Needles may be partially consumed and turn brown, or they may be entirely consumed. The mature larvae are about an inch long, are yellow with two to four rows of black spots down each side, and a have a red head. Defoliation, even complete defoliation, is seldom fatal. Populations seldom stay at high levels for very long. Rodents and other predators, disease, parasites, and unfavorable weather serve to control the number of sawflies. Damage is worse where trees are crowded, where there is serious hardwood competition, and on poor sites. Infestations are generally spotty, so broadcast spraying of chemicals is not necessary or practical. Physical removal and crushing of clustered caterpillars may be an option. Spot spraying can be done with acephate (Orthene), carbaryl (Sevin) or chlorpyrifos (Dursban). Insecticidal soaps are also effective if the larvae are covered with spray.

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